

Material Safety Data Sheet

Section 1: Chemical Product and Company Identification

Product Name: Azodicarbonamide

Supplier Name: HAITAI CHEMICAL INDUSTRY. INC.

CAS#: 101-25-7

Synonym: 3,7-dinitroso-1,3,5,7-tetraazobicyclo-nonane

Supplier Address: Quanzhou City houzhu oil depot side(from the cross seabridge 600 meters)

Molecular formula: C₅H₁₀N₆O₂

TEL:(86)0595 28869898

MSDS NO.: #473

Section 2: Composition and Information on Ingredients

Components:

NAME	CAS#	EINECS#
AZODICARBONAMIDE	#123-77-3	204-650-8

Toxicological Data on Ingredients: AZODICARBONAMIDE, F.C.C: ORAL (LD₅₀):

Acute:>6400mg/kg [Rat]. DERMAL

(LD₅₀): Acute:>500mg/kg [Rat].

Section 3: Hazards Identification

Potential Acute Health Effects: Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation

Potential Chronic Health Effects:

Slightly hazardous in case of skin contact (sensitizer).

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available.

The substance may be toxic to kidneys.

Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. WARM water MUST be used. Get medical attention.

Skin Contact:

In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Flammable.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...).

Fire Hazards in Presence of Various Substances:

Flammable in presence of open flames and sparks, of heat. Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available. Slightly explosive in presence of heat.

Fire Fighting Media and Instructions:

Flammable solid. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill:

Flammable solid. Stop leak if without risk. Do not touch spilled material. Use water spray curtain to divert vapor drift. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

Section 7: Handling and Storage

Precautions:

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.

Storage:

Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Sensitive to light. Store in light-resistant containers.

Section 8: Exposure Controls/Personal Protection**Engineering Controls:**

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Crystalline powder.)

Odor: Not available.

Taste: Not available.

Molecular Weight: 116.08 g/mole

Color: Orange-Red. Yellow.

PH (1% soln/water): Not available.

Boiling Point: Not available.

Melting Point: Decomposition temperature: 225° C (437° F)

Critical Temperature: Not available.

Specific Gravity: Not available.

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, diethyl ether.

Solubility:

Soluble in hot water.
Partially soluble in diethyl ether.
Very slightly soluble in cold water.
Insoluble in organic solvents.
Soluble in DimethylSulfoxide.

Section 10: Stability and Reactivity Data

Stability: The product is stable.
Instability Temperature: Not available.
Conditions of Instability: Heat, ignition sources, incompatible materials
Incompatibility with various substances: Reactive with oxidizing agents.
Corrosivity: Not available.
Special Remarks on Reactivity: Sensitive to light.
Special Remarks on Corrosivity: Not available.
Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.
Toxicity to Animals:
Acute oral toxicity (LD50): >6400 mg/kg [Rat]. Acute dermal toxicity (LD50): >500 mg/kg [Rat].
Chronic Effects on Humans:
MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. May cause damage to the following orga
Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of ingestion,
Special Remarks on Toxicity to Animals: Not available.
Special Remarks on Chronic Effects on Humans: May affect genetic material (mutagenic)
Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects:
Skin: May cause skin irritation. It may be absorbed by the skin.
Eyes: May cause mechanical eye irritation.
Inhalation: May cause respiratory tract irritation.
Ingestion: May cause gastrointestinal tract irritation with hypermotility and diarrhea. May affect respiration (respiratory stimulation, asthma
Chronic Potential Health Effects:
Skin: Prolonged or repeated skin contact may cause skin sensitization (dermatitis)
Inhalation: Prolonged or repeated inhalation may affect the liver, metabolism, blood.
Ingestion: Prolonged or repeated ingestion may affect the kidneys, and endocrine system (thyroid hypofunction)

Section 12: Ecological Information

Ecotoxicity: Not available.
BOD5 and COD: Not available.
Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradat
Toxicity of the Products of Biodegradation:
The products of degradation are less toxic than the product itself.
Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: CLASS 4.1: Flammable solid.
Identification: : Azodicarbonamide UNNA: 3242 PG: II
Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations: TSCA 8(b) inventory: Azodicarbonamide
Other Regulations:
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS:
This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:
WHMIS (Canada):
CLASS B-4: Flammable solid. CLASS D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC):
R5- Heating may cause an explosion. R42- May cause sensitization by inhalation. R44- Risk of explosion if heated under confinement. S16- Keep away from sources of ignition - No smoking. S22- Do not breathe dust. S24- Avoid contact with skin. S28- After contact with skin, wash immediately with plenty of water. S37- Wear suitable gloves.

Section 16: Other Regulatory Information

Federal and State Regulations: TSCA 9(b) inventory: Azodicarbonamide
Other Regulations:
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1201). EINECS:

Other Classifications:
WHMIS (Canada):
CLASS B-4: Flammable solid. CLASS D-3B: Material causing other toxic effects (TOXIC).

DSCL (EEC):
R5- Heating may cause an explosion. R42- May cause sensitization by inhalation. R44- Risk of

Section 17: Other Regulatory Information

Federal and State Regulations: TSCA 10(b) inventory: Azodicarbonamide

Section 16: Other Information

References: Not available.
Other Special Considerations: Not available.
Created: 10/09/2005 04:18 PM
Last Updated: 11/01/2015 12:00 PM

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